

REMARKS

Claims 1-28 are pending in the application. Favorable reconsideration is respectfully requested in light of the following Remarks.

1. The Office action rejects Claims 1-3, 7-12, 15-17 and 21-26 under 35 U.S.C. 103(a) over Cole (U.S. Patent No. 6,008,449, hereinafter "Cole") in view of Stein et al. (U.S. Patent No. 5,071,491, hereinafter "Stein") or Hollaus et al. (U.S. Patent No. 4,567,316, hereinafter "Hollaus"). The rejection is respectfully traversed.

By this Amendment, independent Claims 1 and 15 are amended to include the feature of a metal foil having a first surface and a second surface opposite the first surface, the first surface of the metal foil bonded to an insulative substrate and the second surface of the metal foil including an interconnect pattern in electrical contact with pads located on a same side of each solar cell for electrical interconnecting a plurality of solar cells in a series string such that electrical current from each solar cell in the series string is transported from the pads and combined at an edge connector of said metal foil, the series string including a bypass diode for allowing the series string to be bypassed in case of failure of the series string. Support for this feature can be found, for example, in *Paragraphs [0020] and [0021]* and shown in *Figures 3 and 4 below*.

FIG. 3

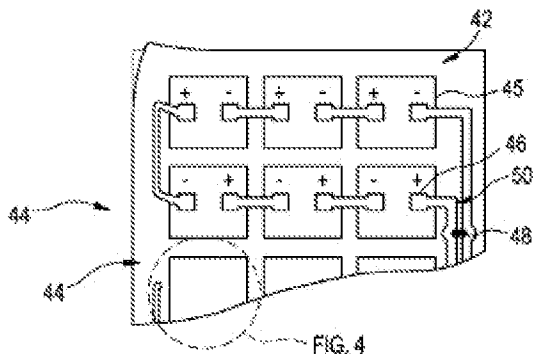


FIG. 4



Cole discloses electrically connecting opposite sides of each solar cell 22 to the reflective layer 48 in series. Specifically, adjacent solar cells 22 are electrically coupled

by connecting a thin film portion 66 and a substrate 68 of each solar cell to the reflective layer 48 with conductive contacts 72. The reflective layer 48 has gaps at the transparent regions 42 so that current is directed in series through each solar cell 22. See *Figs. 1 and 5* below; col. 7, lines 55-61. The conductive contact 72 may comprise continuous beads or intermittent bead portions that are formed from solder or other conductive materials to electrically couple solar cells 2 by way of the reflective layer 48 positioned between each pair of solar cells. Thus, the reflective layer 48 in Cole serves a dual purpose of electrically coupling adjacent solar cells 2 and reflecting incident radiation. See col. 7, line 63-col. 8, line 7.

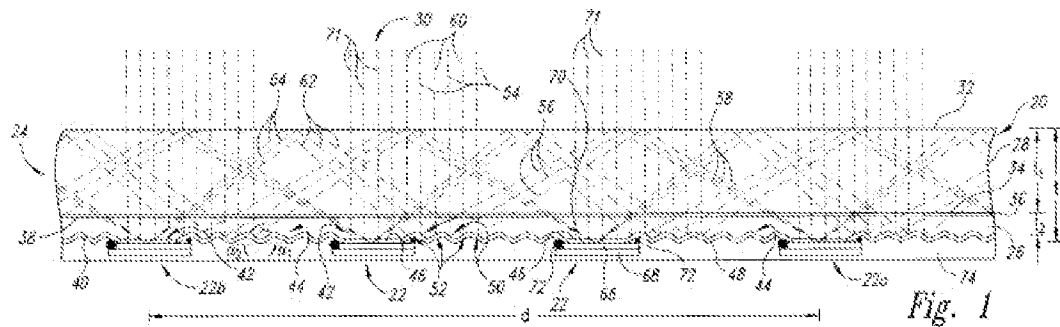


Fig. 1

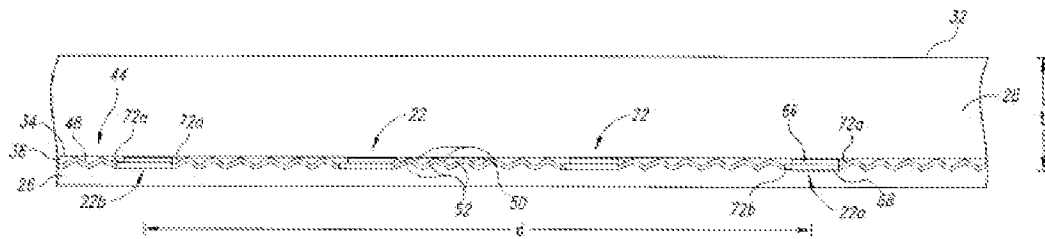


Fig. 5

Applicant agrees with the Office action that Cole does not teach an edge connector and a plurality of solar cells connected in series by pads located on the same side of each solar cell.

However, Applicant respectfully disagrees with the Office action that Cole teaches a metal foil having a first surface and a second surface opposite the first surface, the first surface of the metal foil bonded to an insulative substrate and the second surface of the metal foil including an interconnect pattern in electrical contact with pads located

on a same side of each solar cell for electrical interconnecting a plurality of solar cells in a series string such that electrical current from each solar cell in the series string is transported from the pads and combined at an edge connector of the metal foil, as recited in Claims 1 and 15. In Cole, the solar cell 22 does not have pads, and therefore the reflective layer 48 can not interconnect adjacent solar cells by contacting pads. Rather, the reflective layer 48 interconnects adjacent solar cells by the conductive contacts 72 (i.e., by solder joints).

Stein and Hollaus add nothing to overcome this shortcoming in Cole. Thus, the combination of Cole, Stein and Hollaus fails to teach or suggest all the claim limitations, and the Office action fails to establish a *prima facie* case of obviousness.

For at least this reason, Claims 1-3, 7-12, 15-17 and 21-26 are allowable over the applied art, taken singly or in combination. Withdrawal of the rejection is respectfully requested.

2. The Office action rejects Claims 4-6, 13, 18-20 and 27 under 35 U.S.C. 103(a) over Cole in view of Stein or Hollaus, and further in view of Epstein (U.S. Patent Application Publication No. 2003/0058553, hereinafter “Epstein”), and Claims 14 and 28 under 35 U.S.C. 103(a) over Cole in view of Stein or Hollaus, and further in view of Glenn (U.S. Patent No. 6,313,396, hereinafter “Glenn”). The rejections are respectfully traversed.

Claims 4-6, 13 and 14 depend from Claim 1, and Claims 18-20, 27 and 28 depend from Claim 15. For the same reason as given above for Claims 1 and 15, these claims are also allowable over the applied art, taken singly or in combination. Withdrawal of the rejection is respectfully requested.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of the application is earnestly solicited.

Appl. No. 10/711,108
Response to final Office action dated July 23, 2009
Attorney Docket 147903-1

Should Examiner Trinh believe anything further would be desirable in order to place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

It is believed that any additional fees due with respect to this paper have already been identified. However, if any additional fees are required in connection with the filing of this paper, permission is given to charge account number 07-0868 in the name of General Electric Company.

21 September 2009

Respectfully submitted,

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